AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A hematocrit sensor comprising:

a blood circuit having two ends;

~~a sensor that measures hematocrit values and is connected to said blood circuit;~~

a blood purifier connected ~~in the middle of~~ to said blood circuit between said two ends ~~that purifies~~ and configured to purify blood [[while]] that is being circulated extracorporeally ~~circulating~~ in said blood circuit; and

a sensor connected to said blood circuit and configured to measure hematocrit values, the sensor including

a housing connected to a portion of said blood circuit, [[;]]

a slot ~~built in~~ provided with said housing,

one of a slit or a plurality of pores ~~built~~ included in said slot of said housing, [[;]]

and

a light emission [[means]] device and a single light reception ~~means built in~~ device provided with said housing such that both said light emission device and said single light reception device ~~means~~ face said blood circuit through either said slit or said plurality of pores, respectively.

2. (Currently Amended) The hematocrit sensor of claim 1, further comprising a cover ~~fixed to~~ provided at said housing, which [[that]] covers said slot when said cover is closed.

3. (Currently Amended) The hematocrit sensor of claim 1, further comprising a cover ~~fixed to~~ provided at said housing, which [[that]] swings open against [[the]] said housing and uncovers said slot when said cover is opened.

4. (Currently Amended) The hematocrit sensor of claim 2, further comprising a holding ~~means that holds~~ device configured to hold the cover in place when the slot is covered.

5. (Currently Amended) The hematocrit sensor of claim 2, further comprising a detection ~~means that detects~~ device configured to detect at least one of whether ~~or not~~ said blood circuit is in said slot, and whether ~~or not~~ said cover is closed.

6. (Currently Amended) The hematocrit sensor of claim 1, wherein said blood purifier ~~performs~~ configured to perform dialysis treatment.

7. (Currently Amended) The hematocrit sensor of claim 6, further comprising an ultrafiltration pump, a substitution fluid, and a dialyzing fluid.

8. (Original) The hematocrit sensor of claim 1, further comprising a drip chamber connected to said blood circuit.

9. (Currently Amended) The hematocrit sensor of claim 8, wherein said hematocrit sensor is provided with a fixing ~~means is integrally formed with~~ device at said housing of said sensor to fix said drip chamber ~~and said housing~~.

10. (Currently Amended) The hematocrit sensor of claim 1, further comprising an air bubble detector provided with said housing of said sensor and connected to said blood circuit ~~and built in said housing~~.

11. (Currently Amended) The hematocrit sensor of claim 1, further comprising a blood detector connected to said blood circuit, ~~wherein said blood detector detects the~~ and configured to detect a presence of blood in said blood circuit.

12. (Original) The hematocrit sensor of claim 1, wherein said slit has an adjustable width.

13. (Currently Amended) The hematocrit sensor of claim 1, wherein at least one of said plurality of pores has an adjustable diameter.

14. (Currently Amended) A method of measuring hematocrit values ~~using the hematocrit sensor of claim 1~~, comprising:

providing a sensor connected to a blood circuit, said sensor having a slot with either a slit or a plurality of pores, and said sensor including a light emission device and a single light

reception device, both of which are positioned to face said blood circuit through either said slit or said plurality of pores;

emitting light from said light emission [[means]] device toward [[the]] blood flowing through said blood circuit;

receiving said light at said single light reception device, said light being emitted from said light emission device and being reflected from [[the]] said blood flowing through said blood circuit; ~~into said light reception means~~

determining [[the]] a light absorption received by said single light reception [[means]] device; and

~~continuously~~ calculating ~~measured~~ hematocrit values based on [[the]] a strength of ~~the received~~ said light absorption determined by said determining.

15. (Currently Amended) The method of claim 14, wherein:

said light emission device emits light intermittently; and

said ~~measured~~ hematocrit values calculated in said calculating are ~~compensated~~ corrected based on [[the]] a strength of [[the]] an ambient light received by [[the]] said single light reception [[means]] device when [[the]] said light emission device does not emit said light ~~is turned off while said light emission means is flashing~~.

16. (Currently Amended) The method of claim 14, wherein said ~~measured~~ hematocrit values calculated in said calculating are ~~compensated~~ corrected to compensate an error based on [[the]] a flow rate of [[the]] said blood flowing through [[the]] said blood circuit.

17. (Currently Amended) The method of claim 15, wherein said ~~measured~~ hematocrit values calculated in said calculating are ~~compensated~~ corrected to compensate an error based on [[the]] a flow rate of [[the]] said blood flowing through [[the]] said blood circuit.

18. (Currently Amended) The method of claim 14, further comprising:

detecting a presence of said blood flowing through said blood circuit, wherein the calculating starts calculating a first of said ~~measured~~ hematocrit values ~~is calculated~~ at [[the]] a time ~~at which the blood detector~~ said detecting first detects said presence of said blood ~~flow through said blood circuit~~.